

IN THE CLAIMS:

Cancel claims 42, 43, 54 to 57, 64, 65, 79, 83, 86, 89 to 94, 97, 100, 103 to 112 without prejudice.

Add new claims 113 to 134 as follows:

113. (new) A method of making a soluble botulinum toxin comprising:

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expressing a botulinum toxin from a prokaryotic expression vector comprising a botulinum toxin nucleotide sequence in a prokaryotic host cell wherein the prokaryotic expression vector includes a weak promoter relative to a T7 promoter thereby making a soluble botulinum toxin.

114. (new) The method of claim 113 wherein the prokaryotic host cell is E. coli.

115. (new) The method of claim 114 wherein the E. coli is strain BL21(DE3).

116. (new) The method of claim 113 wherein the inducible promoter is a T7 promoter in which expression is repressed.

117. (new) The method of claim 113 wherein a pLys gene is included in the host cell.

118. (new) The method of claim 117 wherein the pLys gene is plasmid encoded.

119. (new) The method of claim 113 wherein the weak promoter is an inducible promoter.

120. (new) The method of claim 113 wherein the promoter is a T7lac promoter.

121. (new) The method of claim 120 wherein the host cell includes a lacIq gene.

122. (new) The method of claim 113 wherein the botulinum toxin is type A.

123. (new) The method of claim 113 wherein the botulinum toxin is selected from the group consisting of type B, C, D, E, F and G.

124. (new) The method of claim 113 wherein the botulinum toxin nucleotide sequence specifically hybridizes under highly stringent conditions to SEQ ID NO:27.

125. (new) The method of claim 113 wherein the botulinum toxin nucleotide sequence specifically hybridizes under highly stringent conditions to a nucleotide sequence selected from the group consisting of SEQ ID NO:39, SEQ ID NO:41, SEQ ID NO:49, SEQ ID NO:51, SEQ ID NO:59, SEQ ID NO:61, SEQ ID NO:65, SEQ ID NO:70 and SEQ ID NO:76.

126. (new) A method of making a soluble botulinum toxin comprising:

expressing a nucleotide sequence from a prokaryotic expression vector comprising a botulinum toxin nucleotide sequence in a prokaryotic host cell wherein folding chaperone proteins are expressed in the host cell thereby making a soluble botulinum toxin.

127. (new) The method of claim 126 wherein the folding chaperone proteins are GroEL or GroES.

128. (new) The method of claim 126 wherein the prokaryotic host cell is E. coli.

129. (new) The method of claim 126 wherein the botulinum toxin is made in batch fermentation.

130. (new) The method of claim 126 wherein the botulinum toxin is type A.

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131. (new) The method of claim 126 wherein the botulinum toxin is selected from the group consisting of type B, C, D, E, F and G.

132. (new) The method of claim 126 wherein the botulinum toxin nucleotide sequence specifically hybridizes under highly stringent conditions to SEQ ID NO:27.

133. (new) The method of claim 126 wherein the botulinum toxin nucleotide sequence specifically hybridizes under highly stringent conditions to a nucleotide sequence selected from the group consisting of SEQ ID NO:39, SEQ ID NO:41, SEQ ID NO:49, SEQ ID NO:51, SEQ ID NO:59, SEQ ID NO:61, SEQ ID NO:65, SEQ ID NO:70 and SEQ ID NO:76.

134. (new) A method of making a soluble botulinum toxin comprising:

expressing a botulinum toxin from a prokaryotic expression vector comprising a nucleotide sequence which specifically hybridizes under highly stringent conditions to a nucleotide sequence selected from the group consisting of SEQ ID